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UTILITY PATENT APPLICATION TRANSMITTAL <small>(Only for new nonprovisional applications under 37 CFR 1.53(b))</small>	Attorney Docket No.	42390PI2945
	First Inventor	Benjamin K. Gibbs, et al.
	Title	WIRELESS TRICKLE SYNC DEVICE
	Express Mail Label No.	ET616076887US

APPLICATION ELEMENTS <small>See MPEP chapter 600 concerning utility patent application contents</small>	ADDRESS TO: Assistant Commissioner for Patents Box Patent Application Washington, DC 20231
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- 1. ☒ **Fee Transmittal Form** (e.g., PTO/SB/17)
(Submit an original and a duplicate for fee processing)
- 2. ☐ **Applicant claims small entity status.**
See 37 CFR 1.27.
- 3. ☒ **Specification** [Total Pages 17]
(preferred arrangement set forth below)
 - Descriptive title of the Invention
 - Cross References to Related Applications
 - Statement Regarding Fed sponsored R & D
 - Reference to sequence listing, a table, or a computer program listing appendix
 - Background of the Invention
 - Brief Summary of the Invention
 - Brief Description of the Drawings (if filed)
 - Detailed Description
 - Claim(s)
 - Abstract of the Disclosure
- 4. ☒ **Drawing(s)** (35 U.S.C. 113) [Total Sheets 2]
- 5. **Oath or Declaration** [Total Pages 4]
 - a. ☒ Newly executed (original or copy)
 - b. ☐ Copy from a prior application (37 C.F.R. § 1.63(d))
(for continuation/divisional with Box 18 completed)
 - i. ☐ **DELETION OF INVENTOR(S)**
Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
- 6. ☐ **Application Data Sheet.** See 37 CFR 1.76

- 7. ☐ **CD-ROM or CD-R in duplicate, large table or Computer Program** (Appendix)
- 8. **Nucleotide and/or Amino Acid Sequence Submission** (if applicable, all necessary)
 - a. ☐ Computer Readable Form (CRF)
 - b. **Specification Sequence Listing on:**
 - i. ☐ CD-ROM or CD-R (2 copies); or
 - ii. ☐ paper
 - c. ☐ Statements verifying identity of above copies

ACCOMPANYING APPLICATION PARTS	
9. <input checked="" type="checkbox"/> Assignment Papers (cover sheet & document(s))	
10. <input type="checkbox"/> 37 C.F.R. § 3.73(b) Statement <input type="checkbox"/> Power of Attorney <small>(when there is an assignee)</small>	
11. <input type="checkbox"/> English Translation Document (if applicable)	
12. <input type="checkbox"/> Information Disclosure Statement (IDS)/PTO-1449 <input type="checkbox"/> Copies of IDS Citations	
13. <input type="checkbox"/> Preliminary Amendment	
14. <input checked="" type="checkbox"/> Return Receipt Postcard (MPEP 503) <small>(Should be specifically itemized)</small>	
15. <input type="checkbox"/> Certified Copy of Priority Document(s) <small>(if foreign priority is claimed)</small>	
16. <input type="checkbox"/> Request and Certification under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.	
17. <input type="checkbox"/> Other: _____	

18. If a **CONTINUING APPLICATION**, check appropriate box, and supply the requisite information below and in a preliminary amendment:
☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No: _____
Prior application Information: Examiner _____ **Group/Art Unit:** _____

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

18. CORRESPONDENCE ADDRESS		
<input checked="" type="checkbox"/> Customer Number of Bar Code Label	<div style="border: 1px solid black; padding: 10px; margin: 0 auto; width: 150px;"><div style="text-align: center; font-weight: bold; font-size: 1.2em;">08791</div></div> <p style="text-align: center; font-size: 0.8em;">PATENT TRADEMARK OFFICE (Insert Customer No. or Attach bar code label here)</p>	or <input type="checkbox"/> Correspondence address below

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City		State		Zip Code	
Country	Telephone	(503) 684-6200		Fax	(503) 684-3245

Name (Print/Type)	Michael A. Proksch	Registration No. (Attorney/Agent)	43,021
Signature		Date	12/18/01

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FEE TRANSMITTAL for FY 2000

Patent fees are subject to annual revision

TOTAL AMOUNT OF PAYMENT (\$) 1,088.00

Complete if Known

Application Number _____
Filing Date _____
First Named Inventor Benjamin K. Gibbs
Examiner Name _____
Group/Art Unit _____
Attorney Docket No. 42390P12945

METHOD OF PAYMENT (check one)

1. ☐ The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:

Deposit Account Number 02-2666
Deposit Account Name Blakely, Sokoloff, Taylor & Zafman LLP

☒ Charge Any Additional Fee(s) Required
Under 37 CFR §§ 1.16, 1.17, 1.18 and 1.20

☐ Applicant claims small entity status
See 37 CFR 1.27.

2. ☒ Payment Enclosed:

☒ Check ☐ Credit card ☐ Money Order ☐ Other

FEE CALCULATION

1. BASIC FILING FEE

Large Entity	Small Entity	Fee Code	Fee (\$)	Fee Description	Fee Paid
		101	740	Utility filing fee	740.00
		106	330	Design filing fee	
		107	510	Plant filing fee	
		108	740	Reissue filing fee	
		114	160	Provisional filing fee	

SUBTOTAL (1) (\$) 740.00

2. EXTRA CLAIM FEES

Total Claims	Extra Claims	Fee from below	
Independent Claims 30	20** = 10	18.00	\$180.00
Multiple Dependent Claims 5	3** = 2	84.00	\$168.00

Large Entity	Small Entity	Fee Code	Fee (\$)	Fee Description
		103	18	Claims in excess of 20
		102	84	Independent claims in excess of 3
		104	280	Multiple Dependent claim, if not paid
		109	84	**Reissue independent claims over original patent
		110	18	**Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$) 348.00

**or number previously paid, if greater, For Reissues, see below

FEE CALCULATION (continued)

3. ADDITIONAL FEE

Large Entity	Small Entity	Fee Code	Fee (\$)	Fee Description	Fee Paid
		105	130	Surcharge - late filing fee or oath	
		127	50	Surcharge - late provisional filing fee or cover sheet.	
		139	130	Non-English specification	
		147	2,520	For filing a request for <i>ex parte</i> reexamination	
		112	920*	*Requesting publication of SIR prior to Examiner action	
		113	1,840*	*Requesting publication of SIR after Examiner action	
		115	110	55 Extension for reply within first month	
		116	400	200 Extension for reply within second month	
		117	920	217 460 Extension for reply within third month	
		118	1,440	218 720 Extension for reply within fourth month	
		128	1,960	228 980 Extension for reply within fifth month	
		119	320	219 160 Notice of Appeal	
		120	320	220 160 Filing a brief in support of an appeal	
		121	280	221 140 Request for oral hearing	
		138	1,510	138 1,510 Petition to institute a public use proceeding	
		140	110	240 55 Petition to revive - unavoidable	
		141	1,280	241 640 Petition to revive - unintentional	
		142	1,280	242 640 Utility issue fee (or reissue)	
		143	460	243 230 Design issue fee	
		144	620	244 310 Plant issue fee	
		122	130	122 130 Petitions to the Commissioner	
		123	50	123 50 Processing fee under 37 CFR 1.17(q)	
		126	180	126 180 Submission of Information Disclosure Stmt	
		581	40	581 40 Recording each patent assignment per property (times number of properties)	
		146	740	246 370 Filing a submission after final rejection (37 CFR § 1.129(a))	
		149	740	249 370 For each additional invention to be examined (37 CFR § 1.129(b))	
		179	740	279 370 Request for Continued Examination (RCE)	
		169	900	169 900 Request for expedited examination of a design application	

Other fee (specify) _____

Other fee (specify) _____

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$) _____

SUBMITTED BY

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(Attorney/Agent)

Complete (if applicable)

Telephone (503) 684-6200

Signature

Michael A. Proksch

Date

12/18/01

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APPLICATION FOR UNITED STATES LETTERS PATENT

FOR

WIRELESS TRICKLE SYNC DEVICE

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"Express Mail" label number ET616076887US

ET 616076887 US

WIRELESS TRICKLE SYNC DEVICE

BACKGROUND

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Consumers desire convenient and affordable ubiquitous access to data. Wireless connections from a PC card may provide a laptop computer with modem capabilities for downloading messages and files. Normal PC card modem devices may be inactive when removed from a laptop or when the laptop is powered down, preventing a further download of messages and files. Whereas, a computer user may access email or Internet services at the office, the on the go business traveler or mobile user often waits for connectivity.

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In present portable communication products, the RF transceiver may operate when the laptop computer is powered and active, but be rendered inoperative when the computer is not powered. Thus, there is a continuing need for better ways to receive desired signals even when the computer may be in a mode that reduces power consumption.

BRIEF DESCRIPTION OF THE DRAWINGS

20

The subject matter regarded as the invention is particularly pointed out and distinctly claimed in the concluding portion of the specification. The invention, however, both as to organization and method of operation, together with objects, features, and advantages thereof, may best be understood by reference to the following detailed description when read with the accompanying drawings in which:

25

FIG. 1 is a block diagram for a system that includes a microprocessor and a

memory that may be used in a laptop computer in accordance with an embodiment on the present invention;

FIG. 2 is a side view of the laptop computer that includes a PCMCIA card slot and cards in accordance with an embodiment on the present invention; and

5 FIG. 3 is a flowchart illustrating some steps that may be used by the system to communicate data in accordance with an embodiment of the present invention.

It will be appreciated that for simplicity and clarity of illustration, elements illustrated in the figures have not necessarily been drawn to scale. For example,
10 the dimensions of some of the elements are exaggerated relative to other elements for clarity.

DETAILED DESCRIPTION

In the following detailed description, numerous specific details are set forth
15 in order to provide a thorough understanding of the invention. However, it will be understood by those skilled in the art that the present invention may be practiced without these specific details. In other instances, well-known methods, procedures, components and circuits have not been described in detail so as not to obscure the present invention.

20 The architecture presented in the embodiments of the invention may have applications to products in portable computing, networking, digital camera applications, wireless technology and a wide range of consumer products based on instrumentation and automotive applications. It should be further understood that the circuits disclosed herein may be used in many systems that include, by way of
25 example only, cellular radiotelephone communication systems, Personal Communication Systems (PCS), modems, two-way radio communication systems, one-way and two-way pagers, Personal Digital Assistants (PDA's) and other hand held devices. Although not shown, the system may include a display device, a keyboard, a cursor control device, a hard copy device, or a sound sampling device

when used in a computer. The specific components and configuration of the computer system may be determined by the particular applications for which the computer system may be used.

In the following description and claims, the terms “coupled” and “connected,” along with their derivatives, may be used. It should be understood that these terms are not intended as synonyms for each other. Rather, in particular embodiments, “connected” may be used to indicate that two or more elements are in direct physical or electrical contact with each other. “Coupled” may mean that two or more elements are in direct physical or electrical contact. However, “coupled” may also mean that two or more elements are not in direct contact with each other, but yet still co-operate or interact with each other.

FIG. 1 is a block diagram of a system 10 for a wireless trickle sync device that may include a host processor 20. Processor 20 may be a microprocessor, a microcontroller, a Reduced Instruction Set Computing (RISC) processor, an ARM™ core from ARM Holdings in Cambridge, England, a StrongARM™ core or an XScale™ core from Intel Corporation in Santa Clara, California, or an embedded core, although the scope of the present invention is not limited in this respect.

System 10 may also include an application processor 40 having hardware and software specific to selected applications. As such, application processor 40 may be capable of processing functions specific to selected products. By way of example, application processor 40 may process algorithms specific to voice recognition when system 10 is part of a cellular telephone communication system. On the other hand, application processor 40 may encrypt and decrypt messages in PKI (public-key infrastructure) implementations or process algorithms to provide email system and web transaction security using, for example, the Elliptic Curve Cryptography (ECC) or the RSA encryption algorithm, named after the three mathematicians R.L. Rivest, A. Shamir, L.M. Adleman. In some embodiments, system 10 may not include an applications processor.

System 10 may include a memory 30 that may be used to store messages transmitted to or by system 10. Memory 30 may also optionally be used to store

instructions that are executed by processor 20 during operation, and may be used to store user data such as the conditions for when a message may be transmitted. In various embodiments, memory 30 may represent a hard disc, a Static Random Access Memory (SRAM), a Dynamic Random Access Memory (DRAM), or a nonvolatile memory such as, for example, a ferroelectric memory or a flash memory, or a combination of these storage devices.

System 10 may also include a Radio Frequency (RF) device 50 capable of processing algorithms particular to wireless data communications and RF signaling. The radio system in RF device 50 may be specially constructed for the desired purposes or integrated and embedded to operate with other functional blocks. The modulated Radio Frequency (RF) signals received at the antenna contain information that may be recovered in a receiver portion of RF device 50. The receiver portion of RF device 50 may include Low Noise Amplifiers (LNAs), an RF mixer, a Local Oscillator (LO), and an Analog-to-Digital Converter (ADC), channel filters and a demodulator. These electrical components may be used to down convert the high frequency modulated signal to a lower Intermediate Frequency (IF) signal that may be demodulated and converted to digital values.

RF device 50 may also include a transmitter portion to transmit data from the antenna. The transmitter portion may include a Digital-to-Analog Converter (DAC), a modulator, a Local Oscillator (LO), an RF mixer, filters and power amplifiers. These electrical components may be used to convert digital values to analog signals that may be modulated and up-converted from the IF frequency range to an RF frequency range, where the modulated signal may be transmitted from the antenna.

RF device 50 may provide baseband processor capabilities to process algorithms associated with Code Division Multiple Access (CDMA), Global System for Mobile Communications (GSM), General Packet Radio Service (GPRS), North American Digital Cellular (NADC), Time Division Multiple Access (TDMA), and third generation (3G) systems like Wide-band CDMA (WCDMA), CDMA-2000, Bluetooth Special Interest Group (Bluetooth SIG), and Institute of Electrical and Electronics Engineers (IEEE) 802.11b/a, among others. It should be noted that RF device 50

may have capabilities to process data for a single algorithm or for multiple algorithms and, in general, provide the proper symbol mapping, modulation, etc. in accordance with the selected specifications.

RF device 50 may provide a high-bandwidth wireless connection to other electronic devices. As shown in FIG. 1, system 10 may wirelessly connect to other devices through one antenna, but other architecture choices may include multiple antenna in the transceiver. A multiple antenna architecture choice places one or more antenna in the receiver and transmitter portions. The multiple antenna may be placed in such a manner as to improve interference cancellation. Properly located antenna may improve the usable range of a transceiver system and aid communications through antenna diversity.

FIG. 2 is a side view of a notebook or laptop computer that illustrates an expansion board, referred to as a PCMCIA card (Personal Computer Memory Card International Association), inserted into an expansion slot in accordance with an embodiment on the present invention. Although not shown in FIG. 2, interconnect is provided to allow the transfer of signals between host processor 20, memory 30 and RF device 50. Originally designed for adding memory to portable computers, the PCMCIA standard is suitable for adding many types of devices to the portable computer. As shown in the figure, two Type II cards may be used to add RF device 50 to system 10 to communicate with processor 20 and the network. Specifically, the antenna and RF device 50 may be connected to a first Type II card that may be inserted, along with a second Type II card that includes a battery and storage expansion (memory 30), into the expansion slot. Connectors 70 may provide power conductors and electrical signal paths between the two cards. Thus, even with processor 20 powered-off, the physical connections provided by connectors 70 enable RF device 50, along with memory 30, to receive power and remain active to provide data for RF wireless communications. Alternatively, the bottom card may connect to the top card to form a Type III PC card. It is intended that the types of cards that may be plugged into the expansion slot not limit the scope of the present invention.

In operation, when host processor 20 is used in an embodiment for a laptop computer, the processor may be in either an active state or an inactive state. The active state is a powered-on state that may provide interaction between the user and processor 20. Thus, the user may supply data or other inputs to the processor that are stored or processed by processor 20 or the processor may provide outputs or processing results to the user in response to running software applications. The inactive state, on the other hand, may include a powered-off processor 20. User triggered requests for a power-down state, a sleep state or a standby state generally place the laptop computer in the inactive state. In addition, untriggered events such as, for example, a password-protected timeout of the laptop computer may place processor 20 in the inactive state. Thus, the inactive state may keep processor 20 from actively responding to data received via a keyboard, a voice recognition device, a data port, or a touch-screen device, and further, keep processor 20 from providing application results to the user. In other words, the inactive state may conserve the battery strength of the laptop computer, but also generally keeps processor 20 from being responsive to the user and to interconnected devices such as a PCMCIA card.

In an active state, host processor 20 may provide an address and interchange data through a bus connected to memory 30. Host processor 20 may also provide and receive data via an RF wireless interface connected to RF device 50. Application processor 40 may also connect through a bus to memory 30 and to RF device 50 to interchange data.

FIG. 3 is a flowchart illustrating some steps that may be used by system 10 to communicate data in accordance with an embodiment of the present invention. As apparent from the following discussions, it is appreciated that throughout the specification the invention relates to the action and/or processes of initiating wireless transmission of data, either machine data or voice data, and communicating with another electronic device when host processor 20 is inactive. Thus, with processor 20 deactivated, RF device 50 may act autonomously or

separately from processor 20 to transmit and receive data in accordance with a user-defined policy.

Referring to FIGs. 1, 2 and 3, system 10 may be placed in a power-on state in step 100 that places processor 20 in the active state. With processor 20 active, the user may configure, define or write a policy in step 110. By way of example, the policy may be a set of user-defined rules in the form of a look-up table that may govern the types of data requested in a wireless communication. Thus, the policy may be a list that identifies intranet services, e-commerce services or other data-intensive services for which the user has an interest. The policy may also include user preferences, email messages, stock quotes, or user-defined web Uniform Resource Locators (URLs), etc. The policy may be used to synchronize data stored on system 10 and another computer. It should be noted that neither the types of user-defined services nor the applications listed as part of the policy are intended as limitations of the present invention.

In step 120, a file containing the policy is downloaded to RF device 50 and stored. Alternatively, the policy may be defined and written in another system and downloaded in a wireless communication to RF device 50 to be stored in memory 30. Thus, it should be noted that in accordance with embodiments of the present invention, RF device 50 may receive and store the policy information whether processor 20 is in the active state or the inactive state. With the policy downloaded to RF device 50, system 10 may be powered-off in step 130. At this point, the policy has been downloaded to RF device 50 and processor 20 may be in the inactive state.

It should be pointed out that even with processor 20 and application processor 40 in the inactive state, RF device 50 may be operable and active to initiate actions in accordance with the stored policy, and thus, RF device 50 may transmit and receive wireless communications in step 140. RF device 50 may be an "intelligent" device that may act as an intermediary or proxy between applications that may run on system 10 and the wireless network connected through the antenna to RF device 50. With processor 20 and application processor

40 inactive, RF device 50 may "preload" data from the network, replacing existing data with fresher data or preparing, in accordance with the policy, to meet the data needs of host processor 20 or application processor 40. Once host processor 20 has become active (step 150), processor 20 may request data from RF device 50 in step 160.

The request made by processor 20 may be passed to card 60 in step 170. RF device 50 may already have retrieved the data from the network that has been requested by processor 20, in which case the data is supplied to processor 20 in steps 180 and 190. If the requested data has not already been retrieved by RF device 50, then the data is retrieved and passed to processor 20 in step 200 and the policy updated in step 210.

With reference to FIG. 2, it should be noted that once card 60 has received and stored the policy, the card may be removed from the expansion slot and still remain active. In other words, RF device 50 may remain active to provide RF communications, requesting and receiving data that may be stored in memory 30. When card 60 is re-inserted into the expansion slot, processor 20 may request the data stored in memory 30.

By now it should be appreciated that a system has been presented that may deactivate the host processor but still transmit and receive data in accordance with a user-defined policy through an RF device that may act autonomously or separately from the host processor. The host processor may request data from the RF device when the processor becomes active. The RF device may save time in providing the requested data to the host processor, having used the policy to anticipate data requests, and accordingly, prepare the data in advance of the request from the host processor.

While certain features of the invention have been illustrated and described herein, many modifications, substitutions, changes, and equivalents will now occur to those skilled in the art. Examples have been provided to show embodiments of the present invention being applied to laptop or notebook computers, but other products are envisioned. The present invention is applicable to a host of products

that utilize RF signaling and communications. It is, therefore, to be understood that the appended claims are intended to cover all such modifications and changes as fall within the true spirit of the invention.

Claims:

1. A system, comprising:
a host processor having an active state that allows a user to specify a policy, and an inactive state where the host processor is inoperative to user inputs; and
a device coupled to the host processor to transmit and receive Radio Frequency (RF) signals in accordance with the policy when the host processor is in the inactive state.
2. The system of claim 1, wherein the inactive state of the host processor includes the host processor in one of a power-off state, a power-down state, a standby state and a sleep state.
3. The system of claim 1, wherein the policy includes at least one selected from a group that includes intranet services, e-commerce services, user preferences, email messages, stock quotes, or Uniform Resource Locators (URLs).
4. The system of claim 1, further comprising a memory coupled to the host processor and to the device.
5. The system of claim 4, wherein the memory stores data received by the device when the host processor is in the inactive state.
6. The system of claim 4, wherein the memory stores the policy.
7. The system of claim 1, where the host processor retrieves data from the device and distinguishes cached data retrieved by the host processor.
8. The system of claim 7, where the device differentiates between the cached data for age information and live data.

9. The system of claim 1, wherein the policy is defined by a user interacting with the host processor in the active state.
10. The system of claim 1 wherein the device remains powered when the host processor is inactive.
11. The system of claim 1, further including an application processor having a bus coupled to the host processor.

12. A portable system, comprising:
a host processor having an active state to generate a policy and an inactive state where the host processor is not responsive to user inputs; and
an RF device attached to a card to insert into a slot of the portable system, wherein the RF device after insertion into the slot is coupled to the host processor to receive the policy and transmit and receive Radio Frequency (RF) signals in accordance with the policy when the host processor is in the inactive state.

13. The portable system of claim 12, wherein the RF device transmits and receives RF signals in accordance with the policy when the card is detached from the portable system.

14. The portable system of claim 12, wherein the card is a PCMCIA card.

15. The portable system of claim 14, wherein the PCMCIA card is a Type II PC card.

16. The portable system of claim 12, wherein the RF device receives a policy to communicate with the host processor and change to the active state according to a completion of transmission or reception of data.

17. A portable computer having a host processor, comprising an RF device to request data in accordance with a policy that stores user-defined services in preparation of a command from the host processor to request the user-defined services.

18. The portable computer of claim 17, wherein the RF device is attached to a PCMCIA card that is inserted into a slot in the portable computer that houses the host processor.

19. The portable computer of claim 17, wherein the host processor is powered-off while the RF device requests data in accordance with the policy.

20. The portable computer of claim 17, wherein the RF device transmits and receives signals in accordance with the policy and acts autonomously from the host processor when removed from the portable computer.

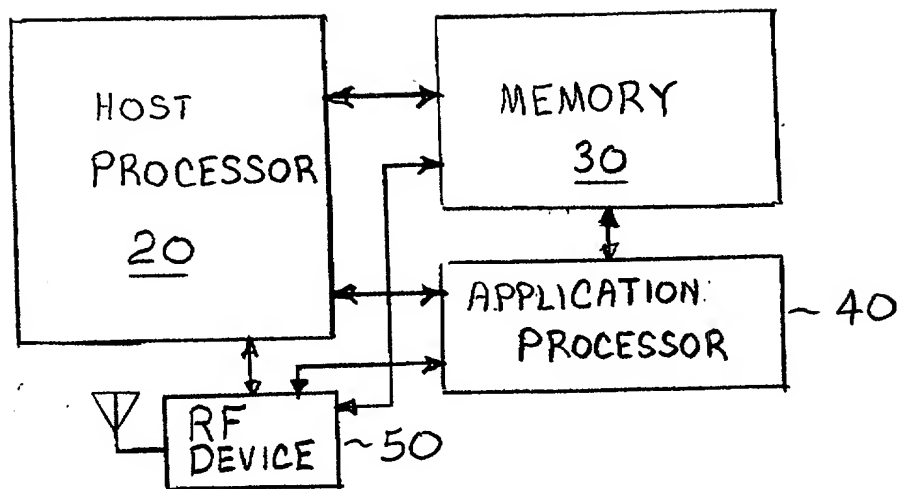
21. A method, comprising:
updating a policy using a processor in a powered state;
downloading the policy to a device;
powering-off the processor; and
using the device to transmit and receive Radio Frequency (RF) signals
according to the policy.
22. The method of claim 21, further comprising storing the RF signals
in a memory coupled to the device.
23. The method of claim 22, further comprising providing power to
place the processor in a powered-on state.
24. The method of claim 23, further comprising generating a request
from the powered-on processor to receive the RF signals from the device.
25. The method of claim 23, wherein the request is passed to the
device attached to a PCMCIA card that is inserted into a slot in a computer that
houses the processor.
26. The method of claim 23, further comprising updating the policy
with a record of activity between the processor and the device.

27. A method, comprising:
- updating a policy using a processor in a portable device;
 - downloading the policy to an RF device that is coupled the portable device;
 - detaching the RF device from the portable device; and
 - using the RF device to transmit and receive Radio Frequency (RF) signals according to the policy.
28. The method of claim 27, further comprising providing power to the RF device through connectors to a battery in a PCMCIA card.
29. The method of claim 27, further comprising storing data for the RF signals in a memory coupled to the RF device.
30. The method of claim 29, further comprising coupling the RF device to the portable device to provide the data to the processor.

WIRELESS TRICKLE SYNC DEVICE

ABSTRACT

A wireless data system may transmit and receive RF signals even though a host processor may be inactive. A policy is generated during an active state of the host processor. During a powered-off state of the processor, an RF device remains active to provide RF communications in accordance with the policy and store the RF signals in a memory for retrieval when the host processor again becomes active.



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FIG. 1

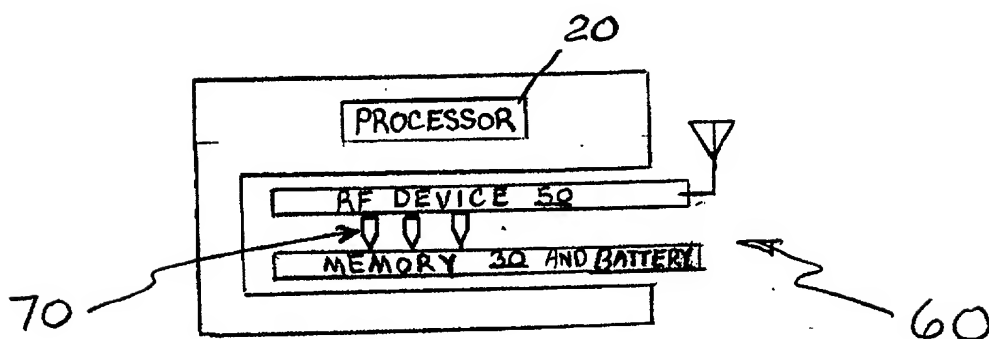


FIG. 2

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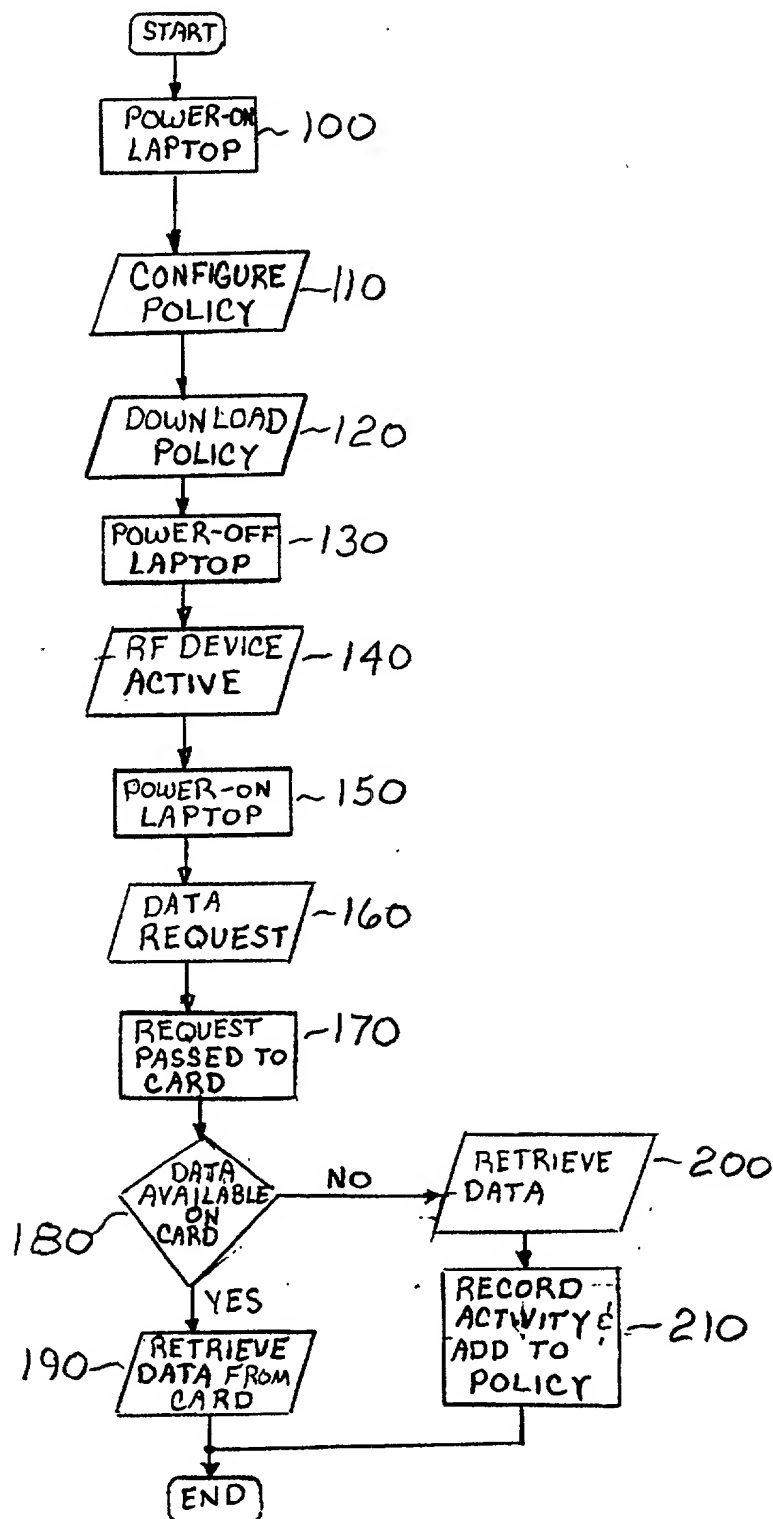


FIG. 3

Attorney's Docket No.: 42390P12945

DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below, next to my name.

I believe I am the original, first, and sole inventor (if only one name is listed below) or an original, first, and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

WIRELESS TRICKLE SYNC DEVICE

the specification of which ☒ is attached hereto.
☐ was filed on _____ as _____
 United States Application Number _____
 or PCT International Application Number _____
 and was amended on _____
 (if applicable)

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claim(s), as amended by any amendment referred to above. I do not know and do not believe that the claimed invention was ever known or used in the United States of America before my invention thereof, or patented or described in any printed publication in any country before my invention thereof or more than one year prior to this application. I do not know and do not believe that the claimed invention was in public use or on sale in the United States of America more than one year prior to this application, nor do I know or believe that the invention has been patented or made the subject of an inventor's certificate issued before the date of this application in any country foreign to the United States of America on an application filed by me or my legal representatives or assigns more than twelve months (for a utility patent application) or six months (for a design patent application) prior to this application.

I acknowledge the duty to disclose all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, Section 119(a)-(d), of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s):

APPLICATION NUMBER	COUNTRY (OR INDICATE IF PCT)	DATE OF FILING (day, month, year)	PRIORITY CLAIMED UNDER 37 USC 119
			<input type="checkbox"/> No <input type="checkbox"/> Yes
			<input type="checkbox"/> No <input type="checkbox"/> Yes
			<input type="checkbox"/> No <input type="checkbox"/> Yes

I hereby claim the benefit under Title 35, United States Code, Section 119(e) of any United States provisional application(s) listed below:

APPLICATION NUMBER	FILING DATE

Docket No. 042390.P12945

I hereby claim the benefit under Title 35, United States Code, Section 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, Section 112, I acknowledge the duty to disclose all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

APPLICATION NUMBER	FILING DATE	STATUS (ISSUED, PENDING, ABANDONED)

I hereby appoint the persons listed on Appendix A hereto (which is incorporated by reference and a part of this document) as my respective patent attorneys and patent agents, with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected herewith.

Send correspondence to:

Michael A. Proksch, Reg. No. 43,021, BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN, LLP

(Name of Attorney or Agent)

12400 Wilshire Boulevard, 7th Floor, Los Angeles, California 90025 and direct telephone calls to:

Michael A. Proksch, (503) 684-6200.

(Name of Attorney or Agent)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full Name of Sole/First Inventor (given name, family name) Benjamin K. Gibbs

Inventor's Signature Benjamin K. Gibbs Date 12/17/01

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(City, State) (Country)

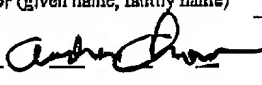
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Inventor's Signature Brian L. Fox Date 12/11/2001

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(City, State) (Country)
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Full Name of Fourth/Joint Inventor (given name, family name) _____
Inventor's Signature _____ Date _____
Residence _____ Citizenship _____
(City, State) (Country)
Mailing Address _____

Full Name of Fifth/Joint Inventor (given name, family name) _____
Inventor's Signature _____ Date _____
Residence _____ Citizenship _____
(City, State) (Country)
Mailing Address _____

Full Name of Sixth/Joint Inventor (given name, family name) _____
Inventor's Signature _____ Date _____
Residence _____ Citizenship _____
(City, State) (Country)
Mailing Address _____

Appendix A

I hereby appoint BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN L.P., a firm including: William E. Alford, Reg. No. 37,764; Farzad F. Amini, Reg. No. 42,261; Peggy S. Avalos, Reg. No. 42,274; William Thomas Babbitt, Reg. No. 39,591; Carol F. Barry, Reg. No. 41,600; Jordan Michael Becker, Reg. No. 39,602; Michael A. Bernadineau, Reg. No. 35,934; Roger W. Blakely, Jr., Reg. No. 25,831; R. Alan Burner, Reg. No. 46,149; Gregory D. Caldwell, Reg. No. 39,926; Jaa-Hao Choi, Reg. No. 45,288; Thomas M. Coesur, Reg. No. 39,637; Robert P. Cogan, Reg. No. 25,049; Donna Jo Coningsby, Reg. No. 41,684; Florin Carie, Reg. No. 46,244; Mimi Diemmy Dao, Reg. No. 45,628; Dennis M. deGuzman, Reg. No. 41,702; Stephen M. De Klerk, Reg. No. 46,503; Michael Anthony DeSanctis, Reg. No. 39,957; Daniel M. De Vos, Reg. No. 37,813; Justin M. Dillon, Reg. No. 42,486; Sanjeet Dutta, Reg. No. 46,145; Matthew C. Fagan, Reg. No. 37,542; Tarek N. Fahmi, Reg. No. 41,402; Mark C. Farrell, Reg. No. 45,988; Thomas S. Ferrill, Reg. No. 42,532; Kyle H. Flindt, Reg. No. 42,539; George Fountain, Reg. No. 37,374; Andre Gibbs, Reg. No. 47,593; James Y. Go, Reg. No. 40,621; Alan Heimlich, Reg. No. 48,808; James A. Heary, Reg. No. 41,064; Libby H. Hope, Reg. No. 46,774; Willmore F. Holbrow III, Reg. No. 41,845; Sheryl Sue Holloway, Reg. No. 37,850; George W. Hoover II, Reg. No. 32,992; Eric S. Hyman, Reg. No. 30,139; William W. Kidd, Reg. No. 31,772; Sang Hui Kim, Reg. No. 40,450; Walter T. Kim, Reg. No. 42,731; Eric T. King, Reg. No. 44,188; Steve Laut, Reg. No. 47,736; Samuel S. Lee, Reg. No. 42,791; Gordon R. Lindeen III, Reg. No. 33,192; Jan Carol Little, Reg. No. 41,181; Julio Loza, Reg. No. 47,758; Joseph Lutz, Reg. No. 43,765; Michael J. Mallie, Reg. No. 36,591; Andre L. Marais, Reg. No. 48,095; Paul A. Mendonsa, Reg. No. 42,879; Clive D. Meneses, Reg. No. 45,493; Richard A. Nakashima, Reg. No. 42,023; Stephen Neal, Reg. No. 47,815; Chun M. Ng, Reg. No. 36,878; Thien T. Nguyen, Reg. No. 43,835; Thinh V. Nguyen, Reg. No. 42,034; Robert B. O'Rourke, Reg. No. 46,972; Daniel E. Ovanzian, Reg. No. 41,236; Gregg A. Peacock, Reg. No. 45,001; Marina Pornova, Reg. No. 45,750; Michael A. Proksch, Reg. No. 43,021; Randol W. Read, Reg. No. 43,876; William F. Ryann, Reg. No. 44,313; James H. Salter, Reg. No. 35,668; William W. Schaal, Reg. No. 39,018; James C. Scheller, Reg. No. 31,195; Jeffrey S. Schubert, Reg. No. 43,098; George Simion, Reg. No. 47,089; Maria McCormack Sobrino, Reg. No. 31,639; Stanley W. Sokoloff, Reg. No. 25,128; Judith A. Szepesi, Reg. No. 39,393; Ronald S. Tamura, Reg. No. 43,179; Edwin H. Taylor, Reg. No. 25,129; Lance A. Termes, Reg. No. 43,184; John F. Travis, Reg. No. 43,203; Kerry P. Tweet, Reg. No. 45,959; Mark C. Van Ness, Reg. No. 39,865; Tom Van Zandt, Reg. No. 43,219; Lester J. Vincent, Reg. No. 31,460; Archana B. Vittal, Reg. No. 45,182; Glenn E. Von Torsch, Reg. No. 41,364; John Patrick Ward, Reg. No. 40,216; Mark L. Watson, Reg. No. 46,322; Thomas C. Webster, Reg. No. 46,154; and Norman Zafman, Reg. No. 26,250; my patent attorneys, and Firasar Ali, Reg. No. 45,715; Charles P. Landrum, Reg. No. 46,855; Suk S. Lee, Reg. No. 47,745; and Raul Martinez, Reg. No. 46,904; Brent E. Vecchia, Reg. No. 48,011; Lehua Wang, Reg. No. 48,023; my patent agents, with offices located at 12400 Wilshire Boulevard, 7th Floor, Los Angeles, California 90025, telephone (714) 557-3800; and and James R. Thein, Reg. No. 31,710, my patent attorney; and Alan K. Aldous, Reg. No. 31,905; Ed Brake, Reg. No. 37,784; Ben Burge, Reg. No. 42,372; Robert A. Burnzlaiff, Reg. No. 35,466; Richard C. Calderwood, Reg. No. 35,468; Jeffrey S. Draeger, Reg. No. 41,000; Cynthia Thomas Faatz, Reg. No. 39,973; Jeffrey B. Huter, Reg. No. 41,086; John Kucvinsky, Reg. No. 40,040; Seth Z. Kelson, Reg. No. 40,670; David J. Kaplan, Reg. No. 41,105; Peter Lam, Reg. No. 44,855; Anthony Martinez, Reg. No. 44,223; Paul Nagy, Reg. No. 37,896; Dennis A. Nicholls, Reg. No. 42,036; Leo V. Novakoski, Reg. No. 37,198; Lanny Parker, Reg. No. 44,281; Thomas C. Reynolds, Reg. No. 32,488; Kenneth M. Seddon, Reg. No. 43,105; Mark Seeley, Reg. No. 32,299; Steven P. Skubrat, Reg. No. 36,279; Howard A. Skaist, Reg. No. 36,008; Robert G. Winkle, Reg. No. 37,474; Sharon Wong, Reg. No. 37,760; Steven D. Yates, Reg. No. 42,242; Calvin E. Wells, Reg. No. 43,256 and Charles K. Young, Reg. No. 39,435, my patent agents, of INTEL CORPORATION; and James R. Thein, Reg. No. 31,710, my patent attorney; with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected herewith. with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected herewith.

Docket No. 42390P12945

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